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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/911,483	07/25/2001	Nozomu Sugo	210803US0	4382

22850 7590 08/07/2003

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1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER
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LISH, PETER J

ART UNIT	PAPER NUMBER
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1754

DATE MAILED: 08/07/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.



# Office Action Summary

Application No.

09/911,483

Applicant(s)

SUGO ET AL.

Examiner

Peter J Lish

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 21 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) 6-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 30-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:



### **DETAILED ACTION**

Applicant's arguments filed 5/21/03 have been fully considered but they are not persuasive. Applicant argues that the lack of a spinning step distinguishes the activated carbon of the instantly claimed invention over that of the prior art, specifically the reference of Takashi et al. Applicant wrongly argues that the process of Takashi requires grinding after activation of the fibers. Rather, Takashi teaches the grinding of isotropic pitch after infusibilization. Therefore, regarding applicant's arguments that the carbonization or activation of a fiber will yield different results from the activation of a granular structure, the carbonization and activation of Takashi are performed on granular isotropic pitch.

Applicant argues that infusibilization of a fiber will result in different amounts of oxygen introduced along the major and minor axis of the fiber. The slight differences, which may result from the infusibilization of a fiber vs. the infusibilization of a granular structure, are of minimal consequence in the production of activated carbon. Additionally, applicant wrongly argues that spinning the pitch will convert the properties of the pitch from isotropic to anisotropic. Certainly, the spinning of an isotropic pitch fiber is possible and known in the art. Therefore, while Takashi teaches that the granular pitch is obtained by grinding spun fibers, the addition of a spinning step is not expected to greatly alter the claimed properties of the activated carbon product.

Regarding applicant's arguments toward the differences in the processes of forming the activated carbon, the fact that the process of Takashi is more complicated or expensive does not distinguish between the product of Takashi and that of the instantly claimed invention.



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The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Rejections - 35 USC § 102***

Claims 1-3, 30, 32, 36, and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by Takashi et al. (JP 11-293527).

The rejection of the previous office action, paper #8, is maintained in its entirety and incorporated herein by reference.

Claims 4, 5, 33, 35, 39, and 41 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Takashi et al.

The rejection of the previous office action, paper #8, is maintained in its entirety and incorporated herein by reference.

***Claim Rejections - 35 USC § 103***

Claims 31, 34, 37, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takashi et al. as applied to claims 30 and 36 above, and further taken with JP 06232006 A.

The rejection of the previous office action, paper #8, is maintained in its entirety and incorporated herein by reference.

Claims 42-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takashi et al.



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Takashi is applied above. The pitch is ground to an average particle size of between 5 and 50 microns and treated to produce an activated carbon having a corresponding particle size as well as a specific surface area in the range of 1600-3000 m<sup>2</sup>/g. It therefore would have been obvious to one of ordinary skill at the time of invention to produce an activated carbon having particle size and specific surface area within the claimed ranges.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter J Lish whose telephone number is 703-308-1772. The examiner can normally be reached on 9:00-6:00 Monday through Friday.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on 703-308-3837. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-305-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



PL  
August 2, 2003

**STUART L. HENDRICKSON**  
**PRIMARY EXAMINER**